

3. During the dive

3.1. Starting the dive

When the Otter dive computer is submerged in water and the depth exceeds 1.6 meters (5 feet), it will automatically activate the dive mode.

Before the dive officially starts, a set of pre-dive self-check information will be displayed on the screen, which includes: dive mode, dive gas, maximum operating depth (MOD), and preset CNS information. A set of three musical notes alarm will alert the user that the dive is starting, and the interface will switch to the dive page.

 **Warning:** The Otter dive computer will automatically enter dive mode upon water entry. Please ensure to activate the dive computer and check the pre-dive self-check information before diving.

3.2. Scuba Diving

In scuba mode, the Otter dive computer displays information such as depth, dive time, and temperature, as well as calculates no-decompression time based on the recent accumulation of nitrogen in the body, and tracks oxygen partial pressure and CNS (Central Nervous System oxygen toxicity) levels.

The main information page will display the following information:

Current depth

No-decompression time at the current depth, in minutes

Maximum depth

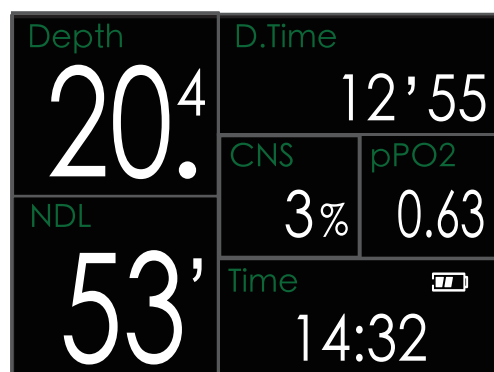
Dive time

Temperature

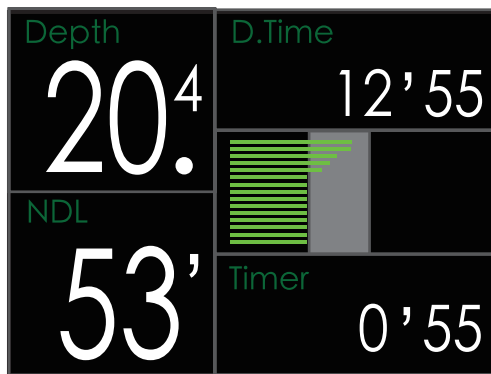
Gas



Press the Up key to switch to next sub-page, the bottom information area will show pPO2 and CNS information:



Press the Up key to switch to next sub-page, the bottom information area will show timer and tissue compartments graph:



Press the Up key to switch to next sub-page, the bottom information area will show compass views:



3.2.1. Diving Gas

Air and enriched air nitrox with an oxygen fraction of up to 40% are supported in scuba mode. The setting of the gas is detailed in the section "2.6.1.1. Setting Gas". Using enriched air nitrox with a higher oxygen fraction compared to air significantly increases the no-decompression limit time. However, using enriched air brings the risk of central nervous system (CNS) toxicity. The use of enriched air requires more complex operations and a higher level of theoretical knowledge. In the bottom information bar's

auxiliary subpage of scuba mode, there is the current gas's oxygen fraction value, through which you can understand the settings of the current diving gas used.



! Warning: The Otter dive computer will automatically use the last set diving gas. Please check the gas settings before each dive.

! Warning: The Otter dive computer cannot replace training in enriched air courses. Please use enriched air gas only after learning the relevant courses at a formal diving training institution.

3.2.2. Oxygen Partial Pressure

In the bottom information bar's auxiliary subpage of scuba mode, there is information on the current oxygen partial pressure (pO₂). It represents the oxygen partial pressure value of the diving gas at the current depth. According to the maximum oxygen partial pressure (pO₂) preset in the section "2.6.1.2. Setting Maximum Oxygen Partial Pressure (pO₂)", an audible and animation alarm will occur when the

current depth exceeds this maximum operating depth (MOD), warning the diver to ascend to a safe depth range to avoid symptoms of central nervous system toxicity due to high oxygen partial pressure.



3.2.3. CNS

In the scuba mode's bottom right information area, there is CNS information. CNS% represents the level of oxygen toxicity to the central nervous system. It depends on the partial pressure of oxygen in the diving gas and the duration of exposure to this partial pressure. Each dive, depending on the gas used, depth, and dive time, will affect the cumulative CNS value. When the CNS value reaches 100%, it indicates that the diver's central nervous system toxicity has reached a dangerous level, and exposure to high partial pressures of oxygen must be stopped until this value drops to a lower

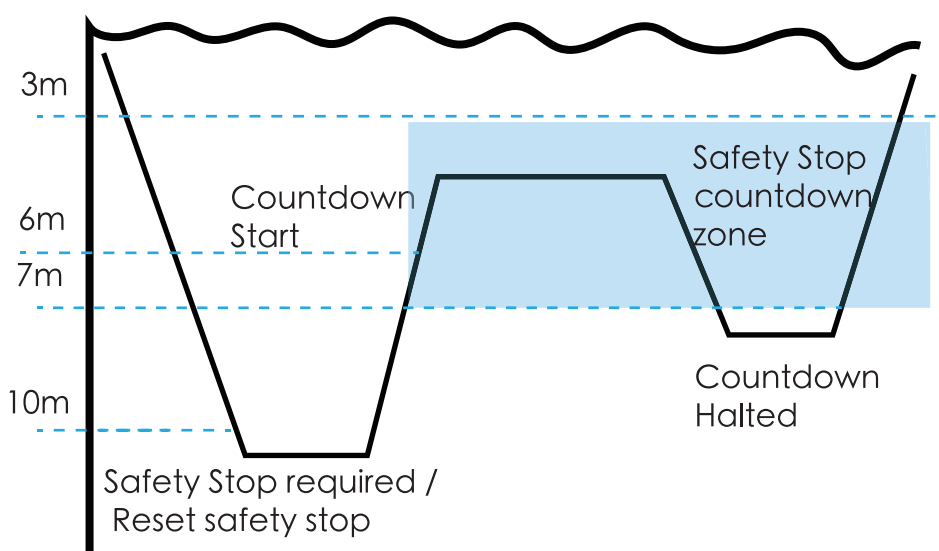
level.



3.2.4. Safety Stop

According to recommendations from research institutions on dive decompression theory and diving physiology, safety stops are widely used and considered to be a very beneficial practice for diving safety.

When a dive exceeds 10 meters (30 feet), divers are advised to complete a 3-minute safety stop at a depth range of 3 meters (10 feet) to 7 meters (23 feet).



Upon entering the safety stop depth range (3 meters to 7 meters), the 3-minute safety stop countdown begins, and yellow safety stop symbol will appear to prompt you to

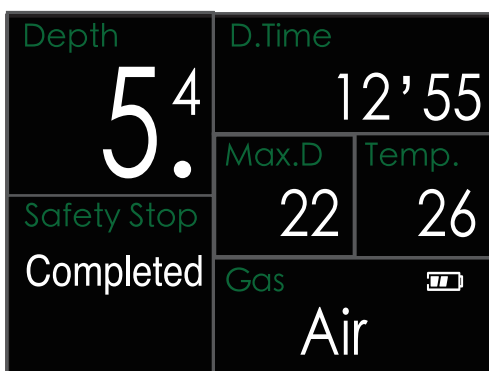
maintain depth.



When exceeding the safe stop depth range, an arrow animation will appear to prompt a return to the correct range.



After completing the safety stop, the word "Completed" will appear in the center of the screen, indicating that the safety stop has been completed, and diver can ascend to the surface.



3.2.5. Exceeding the No-Decompression Limit

 **Warning:** This dive computer is designed for recreational diving and should not be used in professional settings, especially for decompression diving.

If you exceed the no-decompression limit, the Otter dive computer will assist you in decompression with specific information, alarms and animations. Based on the decompression model and actual dive data, the Otter dive computer will provide decompression stop depth and decompression time, starting from a depth of 6 meters / 20 feet, with 3 meters / 10 feet apart step value.

1, When the no-decompression time is running out, NDL will turn red along with sound and vibration alert.



The no-decompression time slot will convert to display the stop depth and stop time.



2, When the diver ascends within the range of the decompression stop, the decompression stop timer will begin counting down. A prompt in the lower right corner will indicate to maintain the current depth.

After completing the decompression stop at the current station, if another decompression stop is required, an upward arrow animation will appear, prompting you to ascend to the next decompression stop level.



3, If you exceed the range of the decompression stop, arrow animations, sound and vibration alarm will prompt t you to return to the depth range of the decompression stop.



4, After completing all the decompression stops, deco complete prompt will appear.

Depth 6.0	D.Time 62' 11	
Deco Completed	Max.D 43	Temp. 26
	Gas Air 	

 Warning: Please ensure not to ascend shallower than your decompression stop depth. You can decompress at a depth deeper than the stop depth to prevent accidents (such as adverse sea conditions, currents, etc.), decompressing at a deeper depth will require more decompression time, and the Otter dive computer will automatically calculate and compensate for this.

3.2.6. Ascent Rate

The Otter dive computer indicates your ascent rate with four bars on the right side of the screen. We consider an ascent rate of less than 9 meters per minute (30 feet) to be safe. If you exceed this ascent rate, the bar indicator on the right side will start flashing and an alarm will sound until you slow down your ascent speed.



Icon	Ascent rate
None	less than 0.3m / 1 feet per second
1 bar	0.3~3m / 1~10 feet per second
2 bars	3~6m / 10~20 feet per second
3 bars	6~9m / 20~30 feet per second
4 bars	Greater than 9m / 30 feet per second

 **Warning:** Ascending too quickly significantly increases the risk of decompression sickness.

3.3. Gauge Mode

In gauge mode, the Otter dive computer only monitors depth, dive time, temperature, and other information, and does not calculate decompression information. It also does not provide alarms for maximum depth, dive time, or ascent rate. Dive time is timed in minutes and seconds and is displayed in the lower left column. You can also view other information by pressing the Up key.

Main page:

Current depth

Dive time, displayed in minutes and seconds.

Maximum depth
Temperature



Press the Up key to switch to next sub-page, temperature data appears:



Press the Up key to switch to next sub-page, compass view appears in the lower left column:



3.4. Altitude diving

In high-altitude areas, the water surface reference atmospheric pressure (ambient pressure) is lower than in sea-level areas. After traveling from a low-altitude area to a high-altitude area, due to the lower ambient pressure, "extra" nitrogen gas residue will appear in your body even if you have not actually dived. It is recommended that you rest for at least 12 hours to allow the residual nitrogen gas in your body to decrease to a level suitable for the high-altitude environment before diving. Because the water surface reference atmospheric pressure is lower in high-altitude areas, the maximum nitrogen pressure allowed by the decompression model will decrease, and correspondingly, the no-decompression limit (NDL) for diving in high-altitude areas will be significantly reduced.

You can adjust the diving safety factor according to your personal physiological condition to ensure a safer dive.

3.5. Ending the Dive

When the depth is shallower than 0.5 meters, the Otter dive computer will end the dive and display a summary of the dive along with no-fly time information (for scuba mode) .



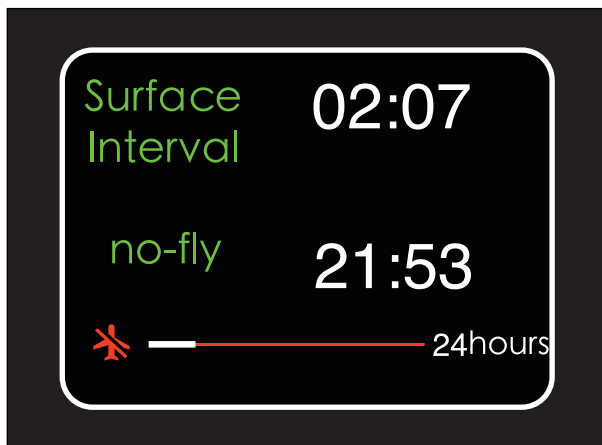
At this point, if you dive again to the dive initiation depth, it will be counted as starting a new dive.

4. After diving

4.1. No-fly and surface interval

After a dive, the Otter dive computer will provide safety information and alerts based on previous dives. On the main screen (the time screen), press the Down key to view the no-fly and surface interval information.

If your physical condition after the dive is not suitable for flying, a no-fly indicator will appear in the upper-left corner until it is safe for you to fly. The exact no-fly time will be displayed on the main interface in hours:minutes format.



The no-fly time is at least 12 hours. For multiple repetitive dives or decompression dives, it is at least 18 to 24 hours. If the dive was performed in gauge mode, the no-fly time is fixed at 48 hours.

The surface interval represents the time elapsed from the end of the dive to the current moment. If the surface interval is within 2 days, it will be displayed precisely in hours and minutes. If it exceeds 2 days, it will only be displayed in days.

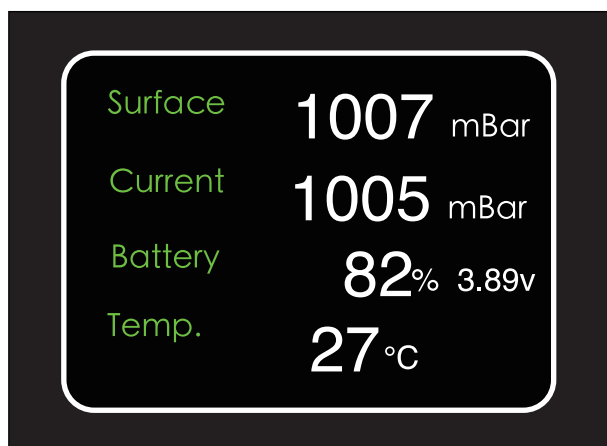
Once the surface interval exceeds 48 hours, both the surface interval and no-fly time sections will disappear from the time interface.

! Warning: When a no-fly symbol appears, you should avoid flying. Refer to the Divers Alert Network (DAN) for recommendations on no-fly times.

4.2. Device info

You can view the device's current information on the main screen. On the surface interval information screen, press the Down key to switch to the device information page.

The information includes surface reference atmospheric pressure, current atmospheric pressure, battery level, and ambient temperature.



4.3. Dive Logs

The Otter dive computer features a dive log function.

Access dive log information through the following steps:

- 1, On the main interface, press the Down key to bring up the menu. Use the Up key to navigate to Log, then press the Down key to confirm and enter the dive log list page.
- 2, The most recent dive log is displayed by default. Use the Up key to browse other logs of interest.
- 3, Press the Down key to view detailed log information.
- 4, Simultaneously press the Up and Down keys to exit the log function.

Logs			
25	6 _m	53'	9-23
24	24 _m	69'	9-21
23	16 _m	51'	9-21
22	40 _m	34'	9-19

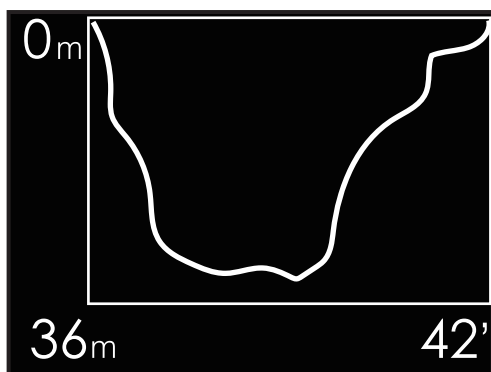
Each log contains three pages:

- 1, Main Information Page

# 166	2025/08/16 09:14 -->09:55	
Scuba	41'23	
Depth	35.7	m
Temp.	29 - 30	°C
Gas	Air	

Maximum depth
 Dive number
 Dive mode
 Start date and time of the dive
 Dive time
 Temperature
 Gas

2, Depth Chart Page



Maximum depth
 Dive depth chart

3, Main Information Page (Gauge mode)

# 167	2025/08/17 15:21-->16:15
Gauge	54'17"
Depth	35.7 m
Avg.D	17.9 m
Temp.	29 - 30 °C

The main dive information screen (in Gauge Mode) includes the following items:

Dive Mode

Dive Start
Date and Time
Dive Time
Maximum Depth
Average Depth
Temperature

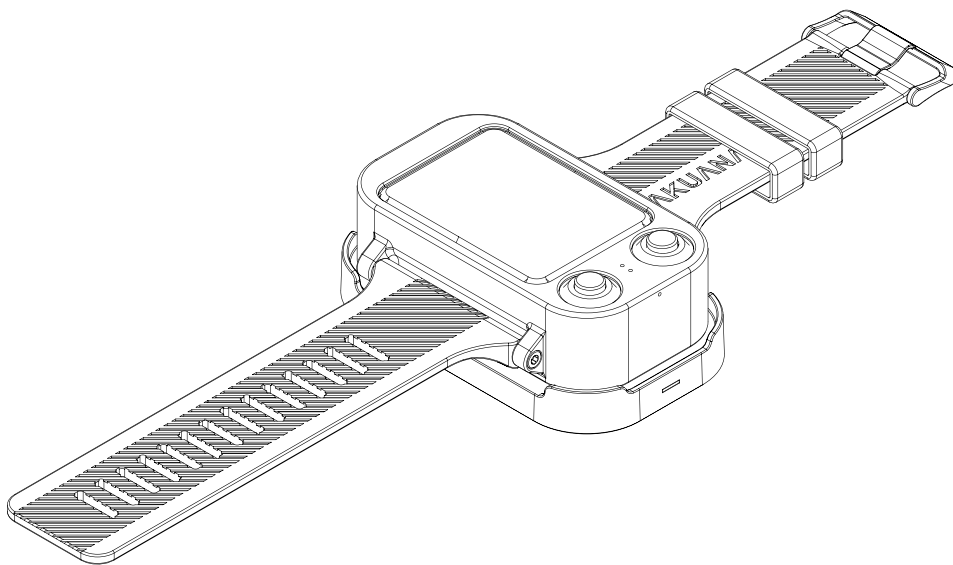
 Note: The Otter dive computer can store up to 2048 logs. When the log storage space is full, the earliest logs will be overwritten by new ones.

 Note: Only dives deeper than 1.5 meters and longer than 5 minutes (in scuba and gauge modes) will be recorded in the log.

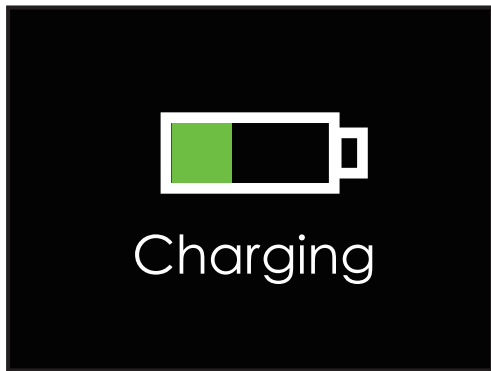
4.4. Charging

After a dive, the Otter dive computer should be placed on its matching charging dock for wireless charging. The dive computer should be laid flat on the charging dock to ensure optimal wireless charging efficiency. When the dock

is connected to a valid USB port, the LED indicator on the side of the charging dock will blink red and blue three times. A solid blue light indicates that charging is in progress, and the LED will turn off once charging is complete. If an abnormal condition occurs (such as overheating or a foreign metal object being placed on the dock), the LED will flash red as an alarm.



While charging, a charging icon animation will appear on the device's time screen. The screen will dim after one minute of inactivity and enter standby mode after five minutes. Press any key to wake the device.



Please ensure the device is charged at least once every three months to prevent battery damage from complete discharge. A full charge typically takes approximately 6 hours.

5. Maintenance and Care

5.1. Repairs and Maintenance

The dive computer should be sent to an authorized dealer for maintenance every 200 dives or every two years (whichever comes first). This maintenance includes seal replacement, waterproof performance testing, and routine operational checks. Since these checks require specialized tools and training, we strongly advise against opening the dive computer case for maintenance.

If you notice any cracks or defects on the case that may affect product durability, contact your dealer immediately for product replacement.

If condensation appears inside the case, stop using the product immediately and have it inspected by an authorized AKUANA dealer.

6. Reference

6.1. Technical Specifications

Algorithm:

Buhlmann ZH-L16C

Dimensions and Weight:

Size 91.6 * 52.5 * 25 mm / Weight: 200 grams

Waterproof:

100 Meter

Compass:

Digital compass with tilt compensation

Depth Sensor:

Measurement range: 0~100 meters, measurement frequency: 2 time/second

Salinity setting (saltwater/freshwater/EN13319)

Accuracy: +/- 1% (at 20°C / 68°F)

Resolution: 10 cm

Temperature Sensor:

Resolution: 1°C

Measurement range: 0°C ~ 45°C

Time:

Accuracy: Average +/- 60 seconds per month

12/24 hour display

Battery:

2000mAh lithium polymer battery, typical usage time 20 hours, standby time 100 days.



Note: Many different factors can affect the average life

of the battery, such as dive duration, backlight level, sound and vibration alarm enabled.

6.2. Trademark

AKUANA Otter, its logo, and other AKUANA brand trademarks are registered or unregistered by Shenzhen Yiru Diving Equipment Co., Ltd., all rights reserved.

6.3. Warranty

Thank you for purchasing AKUANA products. When you need warranty service, please present the warranty card and purchase proof, and please fill in the relevant contents in detail. Our company will provide a 2-year quality guarantee from the date of purchase for users who purchase the Otter diving computer. This warranty does not apply to:

(a) Consumable parts such as batteries or protective films that deteriorate over time, except for failures caused by material or manufacturing defects;

(b) Cosmetic damage, including but not limited to scratches, dents, and damage to plastic ports, except for failures caused by material or manufacturing defects;

(c) Damage caused by use with third-party components or products that do not meet AKUANA product specifications;

(d) Losses caused by accidents, improper use, misuse, fire, liquid contact, earthquake, or other external causes;

(e) Damage caused by operating the AKUANA product not in accordance with the instructions published by AKUANA;

- (f) Damage caused by service (including upgrades and expansions) provided by anyone other than an AKUANA representative or an authorized AKUANA service provider;
- (g) AKUANA products that have been modified to alter functionality without written permission from AKUANA;
- (h) Defects due to normal wear and tear or normal aging of the AKUANA product;
- (i) Any AKUANA product whose serial number has been removed or defaced.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.